

Analysis of Conventional Mutual Fund and Sharia Mutual Fund Performance for Investor's Investment Decision

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ABSTRACT

The development of Sharia Mutual Funds in Indonesia from 2003 to date figures continue to show a positive and fairly stable. Development of Mutual Funds other than look at its NAB but also reflected an increase in the number of products of Mutual Funds progress sharia As of April 2014 there are 62 types of mutual fund products sharia. The problem of this study is limited to the analysis of the performance of Mutual Funds issued by 3 investment management companies that have a conventional share mutual fund products and sharia share Mutual Funds. Limitation of the scope of this study is to select the best performance of Mutual Funds shares products both conventional and sharia with a performance analysis in the period 2011 to 2013. The purpose of this study is to compare the performance of sharia mutual funds with conventional mutual funds, so that it can be known that Mutual Funds are most optimal in performance and level of return. Samples are taken by purposive sampling, with the following criteria: (1) Mutual Fund shares, (2) Sharia mutual funds shares and conventional mutual fund shares which are products of the Investment Manager Company, (3) performance data taken from the period January 2011 to 2013. This study was conducted by using the data analysis and the research variable is performance data of each Fund with the performance measurement methods: (1) Treynor method, (2) Sharpe method, (3) Jensen method. Then from the result, it is obtained by comparing the performance with statistical tests (two different test average). The results of this study indicate that sharia mutual fund shares has a better performance than conventional mutual fund shares. Based on statistical tests it was concluded that there was no significant difference between the performance of sharia mutual fund shares and conventional mutual fund shares during 2011-2013. However, the study shows that the performance of sharia mutual fund shares are worthy bought by potential investors, because its performance tends to be better than the performance of conventional mutual fund shares.

1. Introduction

As the biggest muslim country in the world, Indonesia is a huge market for the development of the Islamic finance industry. Islamic investment in capital market that is part of Islamic finance industry has an important role to increase the market shares of the Islamic financial industry in Indonesia. Although its development is relatively new comparing to Islamic banking or Islamic insurance but in line with its significant growth in Indonesian capital market, it is expected that Islamic investment in Indonesian capital market will experience rapid growth.

Since November 2007, Bapepam-LK has issued a list of Islamic Securities (Daftar Efek Syariah/DES) which contains Islamic stocks in Indonesia. With the DES, the community will be easier to determine which shares are sharia stocks, because DES is the only reference of sharia stocks list in Indonesia. The existence of DES then is followed up by BEI (Indonesian Stock Exchange) by launching Indonesian Sharia Stock Index (ISSI/Indeks Saham Syariah Indonesia) on May, 12th, 2011. ISSI constituents consist of all shares listed on BEI.

In the same year, precisely on March, 8, 2011, the DSN-MUI has issued Fatwa no 80 about application of sharia principals in mechanism of Equity Securities Trading in Regular Stock Exchange. The existence of the instruction should increase public's trust that Islamic investment in Indonesian capital market is appropriate with sharia principals as long as it meets the criteria laid out in the instruction.

As a follow-up of the instruction, BEI has developed an online trading model that is appropriate with sharia principals to be applied by AB (Anggota Bursa/ exchange member) in September 2011. Through the system, the development of Islamic investment in the Indonesian capital market is expected to increase more because the investor will be easy and comfortable in doing stock trading in the principals of sharia.

The development of sharia mutual fund in 2008 to 2009 increased the total net asset value (NAB/Nilai Aktifa Bersih) significantly, although in 2008 there was a global crisis but it did not stop the growth of sharia mutual fund. It resulted the decrease of NAB to RP 1.815 Billion, while in 2009 net asset value increased to Rp 4.530 Billion. The increase of NAB is the result of economic improvement in 2009 that affected the rise of stock price in stock exchange. The rise in share price will certainly affect the value of assets managed by mutual fund. As the result, the unit of NAB will increase. After the global crisis in 2008 and the rise of sharia economic significantly, the development of sharia mutual funds for the next year also increase fairly stable due to Indonesian economy is getting better.

In the year 2011 up to 2012 the NAB of sharia mutual funds increase significantly reached 44.66% which reached 8.050.07 billion, as we can see on the table 1.2., a table of comparison of sharia mutual funds with the total mutual funds per April 2014. Whereas in the year 2014 the position of sharia mutual funds rise stably in the point 8966.03 billion (as of April 2014) after an increase in previous year.

Investing in Mutual Funds in Indonesia is favored by investors. It can be seen from the increase of product type and NAB of mutual funds which always increase from year to year, in sharia mutual fund or conventional mutual funds. It is better to know that investing in mutual funds is not only in sharia mutual fund alone but also in conventional mutual funds which has been grown rapidly before sharia mutual funds. Therefore this study focuses on the comparison of the performance of both mutual fund so that the investors can decide an informed decision. The similar studies have mostly been conducted.

Previous studies focused mostly on mutual funds generally, share mutual funds, bonds or other securities. The difference of this research to others is the focus of the research and the data used. The focus of the research is only in share mutual fund because the share price changes faster than other securities.

2. Theoretical Framework and Development of Hypothesis

Theory of Investment and Mutual Funds

According to Tandelilin (2010) the investment is a willingness to sacrifice the nowadays need with the intention to enlarge the future needs. Investment can be associated with the planting of a number of funds in real assets such as gold, land, houses and other assets. It can be in financial asset such as deposits, stocks, bonds, and other securities. According to Fabozzi (2000:20) the process of investment management covers three steps : to establish investment target, to make investment policy, to choose investment strategy. Based on the Capital Market Law no. 8,1995, the mutual funds is a place used to collect funds from share holder to invest in portfolio of securities by Investment Manager who has received permission from Bapepam-LK (OJK). The investment portfolio from mutual funds consists of various instruments of securities such as stocks, bonds, money market instruments or a mixture of the instruments.

Equity funds allocate more than 80% of their funds in equity securities, primarily on general stock. Stock is known as the high risk high return characteristic, means that equity funds are securities that do not only provide high profit opportunity but also high risk potentially.

The Measurement of Mutual Fund Performance

The performance of mutual funds can be measured by several methods: Sharpe Method, Treynor method, and Jansen Method (Pratomo and Nugroho:2001). The measurement of the performance of share mutual funds is based solely on the changes of NAB/unit and the presence or absence of profit sharing. Based on this data, the performance of mutual fund is measured. The changes of assets (NAB) is not an indicator of performance, because it only records the receive and the release of funds by the investors. The publication of mutual funds always compare the performance and rarely find comparison or ranking of the total assets managed, number of investors, and the growth of both.

Treynor method is a method for measuring the performance of the portfolio developed by Jack Treynor. The measurement of mutual funds by using this method is based on excessreturn or risk premium which is the difference between the average mutual fund with an average return of risk-free investment average (riskless), then divided by the market risk which denoted by Beta. The bigger Treynor measurement, the better the performance of mutual funds is.

Sharpe method is portfolio measurement method invented by William F. Sharpe. Measurement using the method is also based on excessreturn or risk premium but it is divided by deviation standard that reflects the risk totally. The bigger Sharpe measurement, the better the performance of mutual funds is.

Jensen method is based on the Capital Asset Pricing Model (CAPM), which is given a symbol alpha (α). The measurement of Jensen method is used to assess investment manager performance based on how big investment manager be able to deliver returns above the market return. The higher the value of α positive, the better the performance is.

The Comparison of Sharia Mutual Fund and Conventional Mutual Fund Performance

The research of Nik Maheran Nik Muhammad and Masliza Mokhtar measured mutual funds performance namely Net Assets Value (NAB) from nine shares mutual funds and portfolio market price or Kuala Lumpur Sharia Indeks (KLSI) in weekly performance research period during 2002 to 2006 by using Sharpe and Treynor methods. Consistent result happened in measuring the performance of IEFs by using cross-sectional comparison of Sharpe and Treynor methods. In analyzing time series regression, it indicates that the performance of IEFs is significant and positively connected to KLSI's performance.

A research was conducted by Fadillah Mansor which aimed at determining the return of performance of mutual funds in all over the world by using panel data analysis from Januari 1990 to April 2009. The

consistency in previous research, in its statistic average showed that there was no significant difference in return performance of sharia mutual fund toward benchmarks and equals to market benchmarks. Therefore, the result of this study will be useful for prospective investors to participate in mutual funds industry, especially in Malaysia.

Research on the performance of mutual funds was conducted by Hutagalung (2009) which examined the differences of equity funds performance toward stock price index by using Sharpe and Treynor methods. The result of the research which was 95% trust level indicated hipotesis 1 where the value of $-t$ count $(-18,609) < -t$ tabel $(-4,303)$ which meant that generally, by using Sharpe method, there was a difference of share mutual fund performance toward IHSG in 2006 to 2008. In the second hypothesis, the value of $-t$ arithmetic $(-1,102) >$ table was $(-4,303)$, which meant there was no equity fund performance against JCI using Treynor during 2006-2008.

Based on the description above, the hypothesis of this research is to estimate that there are significant differences between the performance of Sharia Mutual Funds and Conventional Mutual Funds.

H1: there is a difference in the performance of Sharia Mutual Fund and Conventional Mutual Fund.

3. Research Method

In this study, the writers used data on mutual funds performance from 2011 to 2013 and obtained the data of mutual funds' performance by observing the level of performance mutual funds in Investment Management Department in Otoritas Jasa Keuangan (OJK/Financial Services Authority). The data collecting in this study was secondary data by using observation technique. In determining the research sample, the writers observed the mutual funds data as a product of investment manager.

The collected data is NAB (Net Asset Value) of each mutual funds, Stock Price Index, and Jakarta Islamic Index (JII) obtained from bloomberg Financial Services Authority (OJK) on Directorate of Investment Management. The data on interest Rate of Bank Indonesia (SBI) is obtained through the website of Indonesian Bank.

In obtaining the sample of the research, the writers used purposive sampling by taking sample of three sharia mutual fund products and three conventional mutual fund products. The criteria is that all the samples are share mutual funds products from the same investment manager. In other word, the samples were taken from three investment managers who have similar mutual fund products and in this case, they have the same share mutual fund products both conventional or sharia stock. One sharia mutual fund and one conventional mutual fund are taken from each investment manager. It is taken to facilitate the writers in conducting the research.

The formula used in measuring the variables is as follows (Eko Priyo Pratomo and Ubaidillah Nugraha, 2004 :173-198):

1. The monthly return in each mutual funds share which used as benchmarks is obtained from the following formula:

$$R = \frac{\text{NAB akhir} - \text{NAB awal}}{\text{NAB awal}} \times 100\%$$

The average return of share mutual funds of NAB is calculated by using arithmetic method.

$$\sum_{i=1}^n R$$

2. The formula to calculate the performance of mutual funds (both sharia or conventional) uses the following formula:

a. Sharpe measurement:

$$S_p = \frac{R_p - RFR}{\delta}$$

b. Treynor measurement:

$$T_p = \frac{R_p - RFR}{\beta}$$

c. Jensen measurement:

$$\alpha = R_p - ((RFR + \beta (R_m - RFR)))$$

3. The statistical testing of performance of conventional and sharia mutual funds use two average different test. And the determiners are (Sugiyono, 2006:142):

a. Critical Area

Critical areas can be found by knowing the value of t table according to the level of significant/real level (α) that used in the research. Critical areas can be determined when the value of z calculated is less than or equal to t table then the decision-making criteria in hypothesis testing is to accept H_0 or to reject H_a , and vice versa.

b. Value of z calculated

Value of z calculated is the value on curve obtained from the results of calculations using derived data from the research. The formula of z calculated is as follows:

$$z \text{ hitung} = \frac{X_1 - X_2}{\sqrt{\frac{S_1^2}{n_1} + \frac{S_2^2}{n_2}}}$$

4. Research Results and Discussion

a) Performance Analysis of Conventional Mutual Funds and Sharia Mutual Funds based on NAB mutual funds.

To calculate the return on investment of the Fund, it takes the form of data per unit Net Asset Value (NAB) of each Mutual Fund during the period January 2011 to December 2013. Through the NAB data, further calculation is carried out.

The following is a summary of the results of calculation of the expected rate of return (expected return) of the conventional Mutual Fund shares which ranked as follows: (i) Trim Capital, (ii) Manulife Dana Saham, (iii) Mandiri Investa Aktif. While on Syariah Mutual Funds the ratings is as follows: (i) Trim Syariah Saham, (ii) Manulife Syariah Sektorial Amanah, (iii) Mandiri Investa Atraktif Syariah.

b) Calculation of The Performance of Conventional Mutual Funds Shares and Sharia Mutual Funds Shares.

1) Treynor Measurement Method

After identifying expected return of Mutual Fund (R_p), beta portfolio (β), and the interest level of the average of risk free rate (RFR), the result of measurement of Mutual Funds Performance by using Treynor measurement method (T_p) on Conventional Mutual Fund shares is ranked as follows: (i) Trim Kapital, (ii) Manulife Dana Saham, (iii) Mandiri Investa Aktif. While on sharia mutual fund shares the rank is as followed: (i) Trim Syariah Saham, (ii) Manulife Syariah Sektorial Amanah, (iii)

Mandiri Investa Atraktif Syariah.

2) Sharpe Measurement Method

Measuring the performance of mutual fund by using Sharpe measurement method (S_p) needs measurement variable like expected return Mutual Fund (R_p), deviation standard (δ), and the interest rates average risk-free (RFR). The following is a summary of measurement result of mutual funds performance by using Sharpe measurement method on conventional mutual fund shares which ranked as follows: (i) Trim Kapital, (ii) Manulife Dana Saham, (iii) Mandiri Investa Aktif. And on shariah mutual fund shares which ranked as: (i) Trim Syariah Saham, (ii) Manulife Syariah Sektoral Amanah, (iii) Mandiri Investa Atraktif Syariah.

3) Jensen Measurement Method

Measuring the performance of mutual fund by using Jensen measurement method (α) needs measurement variable like mutual fund expected return (R_p), beta portofolio (β), the interest rates average risk-free (RFR), and *expected return* market (R_m). The following is a summary of measurement result of mutual fund performance by using Jensen measurement method on conventional mutual fund shares which ranked as follows: (i) Trim Kapital, (ii) Manulife Dana Saham, (iii) Mandiri Investasi Aktif. And on sharia mutual fund shares is ranked as: (i) Trim Syariah Saham, (ii) Manulife Syariah Sektoral Amanah, (iii) Mandiri Investa Atraktif Syariah.

c) Analysis and Hypothesis Testing

As mentioned earlier, this research aims at identifying whether conventional mutual fund shares is better than sharia mutual fund shares based on Treynor, Sharpe and Jensen methods.

The hypothesis of the research is formulated as follow:

H_0 : $\mu_1 = \mu_2$

H_a : $\mu_1 \neq \mu_2$

Note:

H_0 = There is no difference between conventional mutual fund shares and sharia mutual fund shares.

H_a = There is a difference between conventional mutual fund shares and sharia mutual fund shares.

μ_1 = Performance of conventional mutual funds

μ_2 = performance of sharia mutual funds

In determination the critical area, the result of t table with real level 5% is 1,645. And for z calculated from the calculation method of mutual funds performance is as follows:

(i) Z calculated of the performance of the NAB Mutual Fund:

On PT Mandiri Manajemen Investasi with its products namely Mandiri Investa Aktif (conventional) and Mandiri Investa Aktif Syariah (sharia), the result of z test is 0,113002(0,113002<1,645). It can be concluded that with the real level 5%, there is no difference between the performance of conventional mutual fund shares and sharia mutual fund shares based on the NAB return.

On PT Trimegah Asset Management with its products namely Trim Kapital (conventional) and Trim Syariah Saham (sharia), the result of z test is -0,200241(-0,200241<1,645). It can be concluded that with the real level 5 %, there is no difference between the performance of conventional mutual fund shares and sharia mutual fund shares based on the NAB return.

On PT. Manulife Aset Manajemen Indonesia with its mutual fund products: Manulife Dana Saham (conventional) and Manulife Syariah Sektoral Amanah (sharia), the result of z test is -0,174634(-0,174634<1,645). It can be concluded that with the real level 5%, there is no difference between the performance of conventional mutual fund shares and sharia mutual fund shares based on the NAB return.

(ii) Z-test for the performance of mutual fund based on measurement methods:

Based on Treynor measurement method, the result of z-test is -0,265277(-0,265277<1,645). It concludes that with the real level 5%, there is no difference between the performance of conventional mutual fund shares and Sharia Mutual Fund shares.

Based on Sharpe measurement method, the result of z-test is -0,297365(-0,297365<1,645). It concludes that with the real level 5%, there is no difference between the performance of conventional mutual fund shares and Sharia Mutual Fund shares.

Based on Jensen measurement method, the result of z-test is -0,571389(-0,571389<1,645). It concludes that with the real level 5%, there is no difference between the performance of conventional mutual fund shares and Sharia Mutual Fund shares.

5. Conclusions and suggestions

a) Conclusions

As mentioned earlier in chapter I that in the specification of main problem of the research, from the results of the

research can be drawn some conclusions as follows:

1. Based on the result of expected return of the NAB's performance, the overall Sharia Mutual Fund shares during the period 2011 to 2013 has a better performance than Conventional Mutual Fund shares ($0.003758 > 0.002987$), in this case the Sharia Mutual Fund shares are worthy bought by prospective investors.
2. In Treynor method, the overall Sharia Mutual Fund shares during the period 2011 to 2013 has better performance than the conventional mutual fund shares ($0.001513 > -0.002237$), in this case the Sharia Mutual fund shares are worthy bought by prospective investors.
3. In Sharpe method, the overall Sharia share Mutual Funds during the period 2011 to 2013 has a better performance than the conventional share mutual funds ($0.037899 > -0.058117$), in this case the sharia Mutual Fund share are worthy bought by prospective investors.
4. In Jensen method, during 2011 to 2013, the overall sharia mutual fund shares has a better performance than the conventional mutual fund shares ($-0.001093 > 0.002643$), in this case, the sharia mutual fund shares are worthy bought by prospective investors.
5. Through the statistical test result with the of average two different test of the performance of mutual fund shares based on the NAV returns, the measurement using Treynor, Sharpe, and Jensen methods, it was concluded that there was no significant difference between the performance of conventional shares mutual fund and sharia shares mutual fund during the period 2011 to 2013.

b) Suggestions

1. The managers of Investment Management of shares mutual fund are expected to be better in diversifying the portfolio composition. The good diversification of portfolio composition can reduce unsystematic risk which happens in a shares mutual fund namely fluctuations return from period to period. With minimal unsystematic risk, a share mutual fund can have a better performance.
2. It is needed an education from the managers of mutual fund to its investors about knowledge and understanding of investment in mutual fund. By doing this, it is expected that the investors are able to sort out the mutual fund products which have good performance.
3. To complete this thesis or study, it is needed to develop another study related to sharia mutual fund performance in mutual fund industry, so that this study does not focus on one type of mutual fund shares. For example, studies on money market mutual fund (RDPU), Fixed Income Fund (RDPT), and Balanced Fund (RDC) need to be developed in order to provide larger sight for potential investors to invest in mutual funds.

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